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04-21-04

1742

Attorney Docket No. 29195-8173US
Semitool Ref No. P02-0007

Express Mail Label EV336674121US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: RANDY HARRIS *ET AL.*

APPLICATION No.: 10/080,914

FILED: FEBRUARY 22, 2002

FOR: **METHOD AND APPARATUS FOR
MANUALLY AND AUTOMATICALLY
PROCESSING MICROELECTRONIC
WORKPIECES**

EXAMINER: DONALD R. VALENTINE

ART UNIT: 1742

CONF. NO: 7791

**Information Disclosure Statement After First Office Action but
Before Final Action or Notice of Allowance – 37 C.F.R. § 1.97(c)**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

1. Timing of Submission

The information transmitted herewith is being filed *after* three months of the filing date of this application or after the mailing date of the first Office action on the merits, whichever occurred last, but *before* the mailing date of either a final action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, whichever occurs first. The references listed on the enclosed Form PTO-1449 (modified) may be material to the examination of this application; the Examiner is requested to make them of record in the application.

2. Cited Information

☒ Copies of the following references are enclosed:

- ☒ All cited references
- ☐ References marked by asterisks
- ☐ The following:

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01 FC:1806

180.00 OP

- ☐ Copies of the following references can be found in parent U.S. Application No. :

☐ All cited references
☐ References marked by asterisks
☐ The following:
- ☐ This application was filed after 30 June 2003 and no copies of U.S. patents nor published applications are enclosed (See Notice of Deputy Commissioner Kunin on 11 July 2003).
- ☐ The following references are not in English. For each such reference, the undersigned has enclosed: (i) a translation of the reference; (ii) a copy of a communication from a foreign patent office or International Searching Authority citing the reference; (iii) a copy of a reference which appears to be an English-language counterpart; or (iv) an English-language abstract for the reference prepared by a third party. Applicant has not verified that the translation, English-language counterpart or third-party abstract is an accurate representation of the teachings of the non-English reference, though, and reserves the right to demonstrate otherwise.
- ☐ All cited references
☐ References marked by ampersands
☐ The following:

3. Effect of Information Disclosure Statement (37 C.F.R. § 1.97(h))

This Information Disclosure Statement is not to be construed as a representation that: (i) a search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the cited information is, or is considered to be, material to patentability. In addition, applicant does not admit that any enclosed item of information constitutes prior art to the subject invention and specifically reserves the right to demonstrate that any such reference is not prior art.

4. Fee Payment (37 C.F.R. § 1.97(c)) or Certification (37 C.F.R. § 1.97(e))

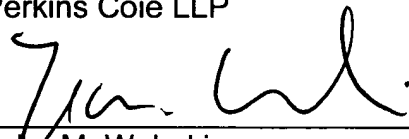
- ☒ Applicant elects to pay the fee under 37 C.F.R. § 1.17(p) \$180.00.
- ☒ Check enclosed for \$180.
☐ Please charge the above fee(s) to Deposit Account No. 50-0665
this paper is provided in triplicate.

- ☐ Applicant submits that no fee is due in light of the following certification under 37 C.F.R. § 1.97(e) (check only one):
- ☐ In accordance with 37 C.F.R. § 1.97(e)(1), the undersigned hereby states that each item of information submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to this filing of this statement; or
- ☐ In accordance with 37 C.F.R. § 1.97(e)(2), the undersigned hereby states that no item of information submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application, or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c), more than three months prior to the filing of this statement.
- ☒ Please charge any underpayment for timely filing of this paper to Deposit Account No. 50-0665.

5. Patent Term Adjustment (37 C.F.R. § 1.704(d))

- ☐ The undersigned states that each item of information submitted herewith was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this statement. 37 C.F.R. § 1.704(d).

Respectfully submitted,
Perkins Coie LLP



John M. Wehckin
Registration No. 42,216

Date: April 19, 2004

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified)
(Use several sheets if necessary)

COMPLETE IF KNOWN

Application Number	10/080,914
Confirmation Number	7791
Filing Date	February 22, 2002
First Named Inventor	Randy Harris
Group Art Unit	1742
Examiner Name	Donald R. Valentine
Attorney Docket No.	29195-8173US



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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	U.S. Patent or Application		Name of Patentee or Inventor of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		NUMBER	Kind Code (if known)			
		09/679,928		Woodruff et al.	10/05/00	
		60/129,055		McHugh	04/13/99	
		60/143,769		McHugh	07/12/99	
		60/182,160		McHugh et al.	02/14/00	
		60/206,663		Wilson et al.	05/24/00	
		1,526,644		Phinney	02/17/25	
		1,881,713		Laukel	10/11/32	
		2,256,274		Boedecker et al.	09/16/41	
		4,046,105		Gomez	09/06/77	
		4,304,641		Grandia et al.	12/08/81	
		4,451,197		Lange	05/29/84	
		4,495,453		Inaba et al.	01/22/85	
		4,566,847		Maeda et al.	01/28/86	
		4,568,234		Lee et al.	02/04/86	
		4,634,503		Nogavich	01/06/87	
		4,639,028		Olson	01/27/87	
		4,648,944		George et al.	03/10/87	
		4,670,126		Messer et al.	06/02/87	
		4,760,671		Ward	08/02/88	
		4,761,214		Hinman	08/02/88	
		4,770,590		Hughes et al.	09/13/88	
		4,828,654		Reed	05/09/89	
		4,902,398		Homstad	02/20/90	
		4,944,650		Masumoto	07/31/90	
		4,949,671		Davis et al.	08/21/90	
		4,988,533		Freeman et al.	01/29/91	

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*EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application(s).

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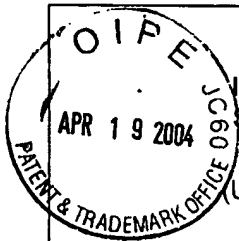
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		NUMBER	Kind Code (if known)			
		5,000,827		Schuster et al.	03/19/91	
		5,061,144		Akimoto et al.	10/29/91	
		5,064,337		Asakawa et al.	11/12/91	
		5,135,636		Yee et al.	08/04/92	
		5,138,973		Davis et al.	08/18/92	
		5,156,174		Thompson et al.	10/20/92	
		5,156,730		Bhatt et al.	10/20/92	
		5,178,512		Skrobak	01/12/93	
		5,217,586		Datta et al.	06/08/93	
		5,222,310		Thompson et al.	06/29/93	
		5,227,041		Brogden et al.	07/13/93	
		5,232,328		Owczarz et al.	08/03/93	
		5,256,274		Poris	10/26/93	
		5,314,294		Taniguchi et al.	05/24/94	
		5,344,491		Katou	09/06/94	
		5,368,711		Poris	11/29/94	
		5,376,176		Kuriyama	12/27/94	
		5,377,708		Bergman et al.	01/03/95	
		5,378,145		Ono et al.	01/03/95	
		5,460,478		Akimoto et al.	10/24/95	
		5,544,421		Thompson et al.	08/13/96	
		5,639,206		Oda et al.	06/17/97	
		5,670,034		Lowery	09/23/97	
		5,681,392		Swain	10/28/97	
		5,684,713		Asada et al.	11/04/97	
		5,700,127		Harada et al.	12/23/97	

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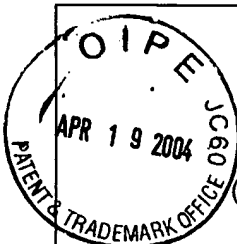
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		NUMBER	Kind Code (if known)			
		5,711,646		Ueda et al.	01/27/98	
		5,723,028		Poris	03/03/98	
		5,731,678		Zila et al.	03/24/98	
		5,746,565		Tepolt	05/05/98	
		5,754,842		Minagawa	05/19/98	
		5,759,006		Miyamoto et al.	06/02/98	
		5,765,444		Bacchi et al.	06/16/98	
		5,765,889		Nam et al.	06/16/98	
		5,785,826		Greenspan	07/28/98	
		5,980,706		Bleck et al.	11/09/99	
		5,985,126		Bleck et al.	11/16/99	
		5,989,397		Laube et al.	11/23/99	
		5,999,886		Martin et al.	12/07/99	
		6,004,828		Hanson	12/21/99	
		6,027,631		Broadbent	02/22/00	
		6,028,986		Song	02/22/00	
		6,074,544		Reid et al.	06/13/00	
		6,090,260		Inoue et al.	07/18/00	
		6,091,498		Hanson et al.	07/18/00	
		6,110,346		Reid et al.	08/29/00	
		6,151,532		Barone et al.	11/21/00	
		6,156,167		Patton et al.	12/05/00	
		6,159,354		Contolini et al.	12/12/00	
		6,162,344		Reid et al.	12/19/00	
		6,162,488		Gevelber et al.	12/19/00	
		6,168,695		Woodruff et al.	01/02/01	

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		NUMBER	Kind Code (if known)			
		6,179,983		Reid et al.	01/30/01	
		6,193,859		Contolini et al.	02/27/01	
		6,199,301		Wallace	03/13/01	
		6,228,232		Woodruff et al.	05/08/01	
		6,234,738		Kimata et al.	05/22/01	
		6,322,677		Duncan	11/27/01	
		6,391,166		Wang	05/21/02	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent or Application			Name of Patentee or Applicant of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	NUMBER	Kind Code (if known)				
		WO	00/02808		Semitool, Inc.	01/20/00		
		WO	00/61498		Semitool, Inc.	10/19/00		
		WO	00/61837		Semitool, Inc.	10/19/00		
		WO	01/90434		Semitool, Inc.	11/29/01		
		WO	02/097165		Semitool, Inc.	12/05/02		
		WO	02/099165		Semitool, Inc.	12/12/02		

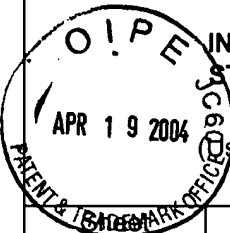
OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.	T
		LEE, TIEN-YU TOM et al., "Application of a CFD Tool in Designing a Fountain Plating Cell for Uniform Bump Plating of Semiconductor Wafers," IEEE Transactions On Components, Packaging and Manufacturing Technology – Part B, February 1996, pp 131-137, Vol 19, No. 1, IEEE	
		MAGNUM, "The perfect partnership of process excellence and production control in a fully-automated platform," (1996), pp 1-12, Semitool, Inc.	

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		RITTER, G., et al., "Two-And Three-Dimensional Numerical Modeling of Copper Electroplating for Advanced ULSI Metallization," June 1999, 13 pgs, E-MRS Conference Symposium M. <i>Basic Models to Enhance Reliability</i> , Strasbourg, France	

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